

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Pateat and Trademark Office Address; COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/196,013	11/19/1998	NORIO KOMA	5586D-7076	8659
26021 75	90 03/22/2002		4.4.0	
	ARTSON L.L.P.		EXAM	INER
500 S. GRAND SUITE 1900			NGUYEN, FRANCIS N	
LOS ANGELES	S, CA 90071-2611		ART UNIT	PAPER NUMBER
*	• -		2674	\$ Jacks
* *			DATE MAILED: 03/22/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

ath or declaration is objected to by the Examination at the content of the examination of the examination of the priority document of the certified copies of the priority document. Certified copies of the priority document. Copies of the certified copies of the priority document. Copies of the certified copies of the priority document. Copies of the certified copies of the priority document. Copies of the certified copies of the priority document. Copies of the certified copies of the priority document. Copies of the certified copies of the priority document. Copies of the certified copies of the priority document is attached detailed Office action for a list extended the translation of the foreign language provided ment is made of a claim for domestic decreases Cited (PTO-892) office Certifice (PTO-1449) Paper No(s) 11 Office	s have been received. s have been received in Anty documents have been reau (PCT Rule 17.2(a)). of the certified copies not copriority under 35 U.S.C. visional application has been copriority under 35 U.S.C.	received in this National Stage received. § 119(e) (to a provisional application received.
ath or declaration is objected to by the Example 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document Certified copies of the priority document. Copies of the certified copies of the priority application from the International Bure attached detailed Office action for a list elegent is made of a claim for domestic the translation of the foreign language providedgment is made of a claim for domestic wiedgment wiedgment is made of a claim for domestic wiedgment wiedgment wiedgment wiedgment wied	s have been received. s have been received in Anty documents have been reau (PCT Rule 17.2(a)). of the certified copies not copriority under 35 U.S.C.	received in this National Stage received. § 119(e) (to a provisional application received.
ath or declaration is objected to by the Example 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document Certified copies of the priority document. Copies of the certified copies of the priority document application from the International But a attached detailed Office action for a list elegated when the translation of the foreign language pro-	s have been received. s have been received in Anty documents have been reau (PCT Rule 17.2(a)). of the certified copies not copriority under 35 U.S.C.	received in this National Stage received. § 119(e) (to a provisional application received.
ath or declaration is objected to by the Example 35 U.S.C. §§ 119 and 120 sowledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document Certified copies of the priority document Copies of the certified copies of the priority application from the International Bure attached detailed Office action for a list wiedgment is made of a claim for domestic	caminer. In priority under 35 U.S.C. Is have been received. Is have been received in A Inity documents have been Ireau (PCT Rule 17.2(a)). In the certified copies not It is priority under 35 U.S.C.	application No received in this National Stage received. § 119(e) (to a provisional application
ath or declaration is objected to by the Example 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document Certified copies of the priority document Copies of the certified copies of the priority document application from the International Bure attached detailed Office action for a list	caminer. In priority under 35 U.S.C. Is have been received. Is have been received in A Introduction of the certified copies not	application No received in this National Stage received.
ath or declaration is objected to by the Example 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document Certified copies of the priority document application from the International Rules.	s have been received. s have been received in Anty documents have been	application No received in this National Stage
ath or declaration is objected to by the Ex 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document Certified copies of the priority document.	kaminer. In priority under 35 U.S.C. Is have been received. Is have been received in A	application No.
ath or declaration is objected to by the Ex 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) Some * c) None of: Certified copies of the priority document	kaminer. In priority under 35 U.S.C. Is have been received.	
ath or declaration is objected to by the Ex 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign b) ☐ Some * c) ☐ None of:	kaminer. n prionty under 35 U.S.C.	§ 119(a)-(d) or (f).
ath or declaration is objected to by the Ex 35 U.S.C. §§ 119 and 120 owledgment is made of a claim for foreign	kaminer.	§ 119(a)-(d) or (f).
ath or declaration is objected to by the Ex 35 U.S.C. §§ 119 and 120	kaminer.	
ath or declaration is objected to by the Ex	ply to this Office action. caminer.	
ath or declaration is shipe at	ply to this Office action.	
	malanta da talan mananan malanta da talan mananan mananan mananan mananan mananan mananan mananan mananan manan	
proposed drawing correction filed on <u>05 Fe</u>	<i>ebruary 2002</i> is: a)⊠ app	roved b) disapproved by the Exam
plicant may not request that any objection to th	ne drawing(s) be held in abe	/ance See 37 CER 1 95(a)
lrawing(s) filed on is/are: a)□ acc∈	pted or b) objected to by	the Examiner.
specification is objected to by the Examine	er.	
apers		
m(s) are subject to restriction and/	or election requirement	•
m(s) is/are objected to.		
m(s) <u>1,3-5 and 7-17</u> is/are rejected.	. •	
m(s) is/are allowed.	onolderation,	
Of the above claim(s) is/are withdr	awn from consideration	
m(s) <u>1.3-5 and 7-17</u> is/are pending in the	application	
osed in accordance with the practice under of Claims	r Ex parte Quayle, 1935	2.D. 11, 453 O.G. 213.
nce this application is in condition for allow	Manad avaont for force	natters prospoution on to the
:!! ! -		·
esponsive to communication(s) filed on 26	3 February 2002	•
s of time may be available under the provisions of 37 CFR (6) MONTHS from the mailing date of this communication. od for reply specified above is less than thirty (30) days, a red for reply is specified above, the maximum statutory perior	N. 1.136(a). In no event, however, may eply within the statutory minimum of od will apply and will expire SIX (6) N	y a reply be timely filed thirty (30) days will be considered timely.
TENED STATUTORY PERIOD FOR REF	PLY IS SET TO EXPIRE	MONTH(S) EDOM
ne MAILING DATE of this communication a Reply	appears on the cover shee	with the correspondence address
	FRANCIS NGUYEN	007.
Office Action Summary		KOMA, NORIO Art Unit
		Applicant(s)
	TENED STATUTORY PERIOD FOR REFLING DATE OF THIS COMMUNICATION is of time may be available under the provisions of 37 CFR (6) MONTHS from the mailing date of this communication. It is do for reply specified above is less than thirty (30) days, a respective of the provision of the mailing date of this communication. It is specified above, the maximum statutory period for reply is specified above, the maximum statutory period for reply will, by state reply within the set or extended period for reply will, by state received by the Office later than three months after the mail ent term adjustment. See 37 CFR 1.704(b). PESPONSIVE to communication(s) filled on 26 period in accordance with the practice under the practice under the practice under the practice under the above claims of Claims of Claims of Claims of Claims of the above claim(s) is/are pending in the practice under the practice und	FRANCIS NGUYEN The MAILING DATE of this communication appears on the cover sheet deply TENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 LING DATE OF THIS COMMUNICATION. so filme may be available under the provisions of 37 CFR 1.136(a). In no event, however, may 60 MONTHS from the mailing date of this communication. So do for reply specified above is less than thirty (30) days, a reply within the statutory minimum of the provisions of the maximum statutory period will apply and will expire SIX (6) Months from the mailing date of this communication of the ply within the set or extended period for reply will, by statute, cause the application to become excevived by the Office later than three months after the mailing date of this communication, even ent term adjustment. See 37 CFR 1.704(b). Responsive to communication(s) filed on 26 February 2002. It is action is FINAL. 2b) This action is non-final. The certain application is in condition for allowance except for formal may of Claims and in accordance with the practice under Ex parte Quayle, 1935 Communication. Of the above claim(s) is/are pending in the application. Of the above claim(s) is/are withdrawn from consideration. In the short of the above claim(s) is/are rejected. In the short of the application is/are allowed. In the short of the application is/are objected to restriction and/or election requirement.

Art Unit: \$674

DETAILED ACTION

Continued Prosecution Application

1. The request filed on 2/26/2002 for a Continued Prosecution Application (CPA) under 37CFR 1.53(d) based on parent Appplication No. 09/196,013 is acceptable and a CPA has been established. It is noted that in paper #10, no amendment to pending claims was made. An action on the CPA follows.

Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

 A person shall be entitled to a patent unless --
 - (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 3. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by McKnight (U.S. Patent 6,144,353).
- 4. As to **claim 1**, McKnight discloses a liquid crystal display(LCD system 12, column 8, lines 48-51) having liquid crystal sandwiched between a pair of substrates (electro-optic layer 22, figure 1A, column 3, line 61) having electrodes (pixel electrode 28 and common electrode 26, column 8, lines 56-64) for driving the liquid crystal based on respective R, G, and B signals (figure 2C, three different driving waveforms 154/155/156) to control transmittance of each of the R light component, G, and B light

Art Unit: ***

components for color display, wherein each of upper limit values of ranges for driving voltages respectively for R display, G display, and B display(display of first color subframe, second color subframe and third color subframe, figures 3A and 3B). Note figure 2C indicates the intensity R/G/B display at t2, t4 and t6, and control voltages of common electrode Vcg, also overdrive voltage (column 9, lines 62-63). Note the corresponding one-to-one relationship between driving voltage and intensity as illustrated in figure 2B and note the separate display of R light, G light, B light in figure 2C. Therefore, the ground of rejection is maintained.

5. As to **claim 5**, note the same citations for claim 1.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKnight in view of Sawada (U.S. Patent 6,078,317).
- 8. As to **claims 3 and 7**, McKnight fails to teach gamma correction. Sawada discloses gamma characteristic adjustment circuit 19(figure 1, column 6, lines 63-65)

Art Unit: 2674

for LCD display. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of McKnight then add a gamma adjustment circuitry, as taught by Sawada, to obtain the combined apparatus McKnight-Sawada, because it would result in proper luminance on LCD display. The ground of rejection is maintained.

- 9. As to claims 4 and 8, McKnight-Sawada does not expressly teach poly-Si TFT. However, fabrication and application to Active Matrix LCD is well known in the affat the time of the invention. It would have been obvious to a person of ordinary skill in the art to make use of poly-Si TFT as switching elements in the apparatus of McKnight-Sawada because it would result in increased aperture ratio, production yield and increase of pixel density in LCD display. The ground of rejection is maintained.
- 10. As to **claims 9-17**, see the same citations above. The ground of rejection is the same as that of claims 1, 3-5, 7-8.
- 11. All claims are drawn to the same invention claimed in the parent application prior to the filing of this Continued Prosecution Application under 37 CFR 1.53(d) and could have been finally rejected on the grounds and art of record in the next Office action. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing under 37 CFR 1.53(d). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2674

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A HJERPE can be reached at 703 305-4579.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service whose telephone number is (703)306-0377.

Art Unit: 7674

FRANCIS N NGUYEN Examiner Art Unit 2674

FN 3/18/2002

> RICHARD HJERPE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600